



The Florida Breast Cancer Early Detection and Treatment Referral Program Report

(Florida Breast and Cervical Cancer Early Detection Program)

2019

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Background

The state of Florida is home to more than 21 million diverse, multi-cultural, and multi-lingual people in which cancer is a personal issue for many. In fact, Florida ranks second in the nation in newly diagnosed cancer cases and mirrors national trends for the top cancer sites. In 2017, there were more than 125,000 new cancers diagnosed and reported to the statewide cancer registry, the Florida Cancer Data System (FCDS). Advancing age is the top risk factor for the development of cancer. Overall, 60.5 percent of newly diagnosed cancers and 73 percent of cancer deaths occur in persons age 65 and older.¹ This age group accounts for approximately 20 percent of Florida's total population. However, cancer occurrence in Florida differs not only by age, but also by sex, race, geography, and stage of disease at diagnosis depending on the cancer site(s).

Cancer was the second leading cause of death, with over 44,000 deaths in Florida in 2017.² Of the leading causes of death in Florida, cancer ranks second in terms of years of potential life lost, following unintentional injury.² Moreover, cancer constitutes an enormous economic burden on Floridians, with approximately \$7 billion annually in hospital charges.¹ During 2017, approximately 8.7 percent of all hospitalizations that occurred among women of all ages listed breast and/or cervical cancer as the primary cause.¹ Additionally, during 2017, breast and cervical cancers accounted for approximately \$242 million in hospital charges.¹

Congress passed the Breast and Cervical Cancer Mortality Prevention Act of 1990; Public Law 101-354, which directed the Centers for Disease Control and Prevention (CDC) to create the National Breast and Cervical Cancer Early Detection Program (NBCCEDP). Currently, all 50 states, the District of Columbia, six United States territories, and 13 American Indian/Alaska Native tribes or tribal organizations are funded to provide breast and cervical cancer screenings.

The Florida Breast Cancer Early Detection and Treatment Referral Program, also known as the Florida Breast and Cervical Cancer Early Detection Program (FBCCEDP), was authorized by the Florida Legislature and signed into law on May 23, 2001. As required by section 381.932, Florida Statutes, the State Surgeon General must submit an annual report to the appropriate substantive committees of the Legislature that includes a description of the rate of breast cancer morbidity (incidence) and mortality in the state and the extent to which women participate in breast cancer screenings from the Behavioral Risk Factor Surveillance System (BRFSS).

Since the inception of the FBCCEDP, vital screening, diagnostic and treatment services have been provided to Florida women. From October 1, 1994 to June 30, 2019, there have been breast screenings and diagnostic services provided to 514,347 Florida women, in which 4,249 breast cancers have been found. More women in Florida have received educational outreach on the importance of screening and early detection to reduce breast cancer morbidity and mortality.

Over the ten-year period from 2008 to 2017, breast cancer incidence rates have increased by 4.9 percent while mortality rates have decreased by 8.7 percent in Florida. The reduction in mortality rates is partly due to ongoing progress in both screening and improved treatment. Despite the decline in breast cancer mortality, breast cancer has remained the most commonly diagnosed cancer and the second leading cause of cancer deaths among women.

Introduction

Problem Statement

Currently in Florida, there are over 2.1 million women between the ages of 50-64, of which 645,003 (29.3 percent) are at or below 200 percent of the federal poverty level (FPL).⁴ Those same-aged women who are at or below 200 percent of the FPL and have no insurance comprise 25.5 percent of Florida's at-need population. In 2019, the FBCCEDP reached 8.5 percent of those at-need women for breast and cervical cancer screenings despite barriers experienced by this population. The barriers include transportation access and difficulty scheduling doctor appointments during non-work hours. The FBCCEDP is currently working to reduce these barriers and support evidence-based interventions to increase breast and cervical cancer screenings to a targeted number of at-need women.

Purpose of the Report

This report includes data on the scope of breast cancer in Florida and how the FBCCEDP is addressing breast cancer prevention for the population, how partners are coordinating preventive efforts, recent successes, and recommended actions to improve breast cancer prevention efforts in the state.

The report discusses evidence-based recommendations to reduce the number of new cases of breast cancer and to improve screening education and awareness. Data for the report were compiled from multiple sources, including state-based telephone surveys, vital statistics, and cancer registry data. These data provide a comprehensive picture of the breast cancer burden within specific populations. More detailed information about each of the data sources is available in Appendix A.

Population-Based Breast Cancer Burden in Florida

Breast Cancer Risk Factors

Factors that are modifiable such as physical activity, maintaining a healthy weight and minimizing alcohol consumption can reduce a woman's risk of breast cancer.⁵ The American Cancer Society recommends maintaining a healthy weight throughout life by balancing food intake with physical activity and avoiding excessive weight gain, and recommends 45 to 60 minutes of physical activity or exercise, five or more days a week to reduce the risk of breast cancer. Breastfeeding a baby and having a first child before the age of 30 also decreases a woman's risk of developing breast cancer.⁵

Factors that can increase a woman's risk for breast cancer include the following: estrogen and progesterone hormone therapy (among postmenopausal women), type 2 diabetes, dense breast, and a family history of breast cancer.⁵ Women should discuss the risks and benefits of hormone replacement therapy, including the possible impact on cancer risk, with their health care provider before starting therapy or if they have been on hormones for an extended period of time.

Breast Cancer Incidence

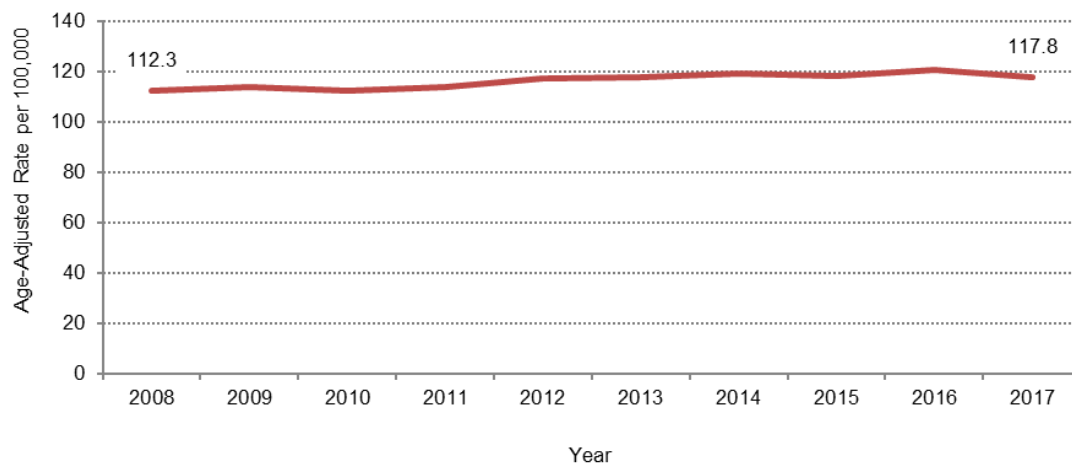
Breast cancer, as with most cancers, is classified based on its extent of spread in the body. Mammography is the single most effective method of early detection since it can identify cancer several years before physical symptoms develop.⁵ However, women should know their breasts and report changes of size, symmetry or skin appearance to their doctor.⁵

Breast cancer is the most common cancer among women, excluding basal and squamous skin cancer, in the United States. Additionally, a small number of men also develop breast cancer.

Breast cancer is the second most common cause of cancer death in women, second only to lung cancer. Treatment is most successful when breast cancer is discovered early in the localized stage.⁵ Breast cancer is predominantly a disease affecting women. In 2017, there were 16,785 new cases of breast cancer among women, with nearly one-third (32%) diagnosed at an advanced stage.¹ In 2017, 2,944 women in Florida died of breast cancer.²

Figure 1 represents the statewide breast cancer incidence rates from 2008 through 2017. The Florida age-adjusted breast cancer incidence rate was 112.3 per 100,000 women in 2008 and 117.8 per 100,000 women in 2017, an increase of 4.9 percent.

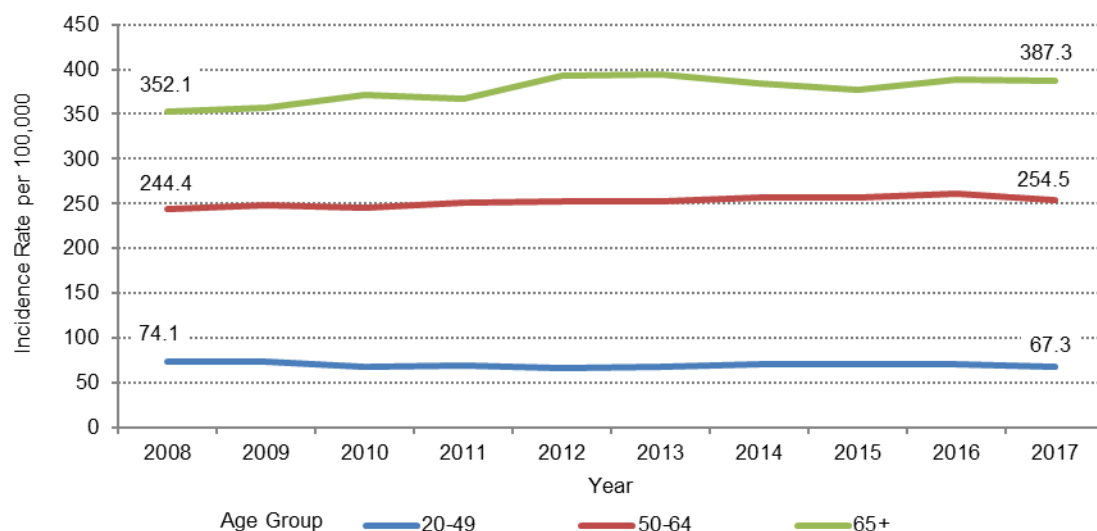
Figure 1. Age-Adjusted Breast Cancer Incidence Rate per 100,000 Women, Florida, 2008-2017



Source: Florida Department of Health, Florida Cancer Data System

Figure 2 depicts age-specific incidence rates for Florida women. In 2017, the age-specific breast cancer incidence rate was 67.3 per 100,000 for the 20-49 age group; 254.5 per 100,000 for the 50-64 age group; and 387.3 per 100,000 for the 65 and older age group. The highest incidence rate was observed among women aged 65 and older. Since 2008, there has been a significant increase in the age-specific breast cancer incidence rate among women aged 50-64 and 65 and over.

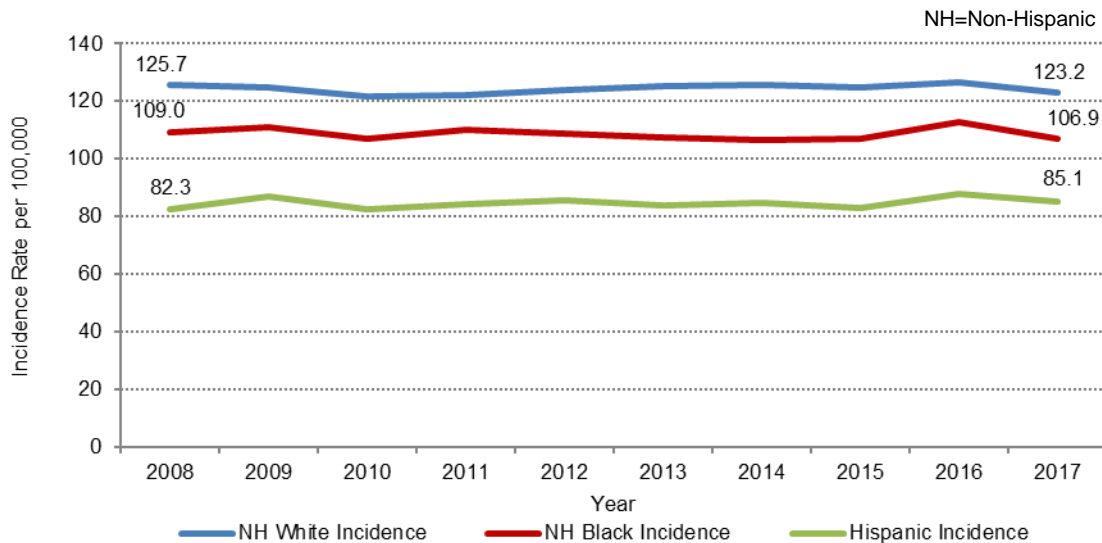
Figure 2. Age-Specific Breast Cancer Incidence Rate per 100,000 Women by Age Group Florida, 2008-2017



Source: Florida Department of Health, Florida Cancer Data System

Figure 3 depicts age-adjusted incidence rates for women by race and ethnicity. In 2017, the age-adjusted breast cancer incidence rate was 123.2 per 100,000 among non-Hispanic White women, 106.9 per 100,000 among non-Hispanic Black women, and 85.1 per 100,000 among Hispanic women. The highest incidence rate was observed among non-Hispanic Whites. The data reflect a 2 percent decrease among non-Hispanic Whites, a 1.9 percent decrease among non-Hispanic Blacks, and a 3.4 percent increase among Hispanics during this 10-year period.

Figure 3. Age-Adjusted Breast Cancer Incidence Rate per 100,000 Women by Race/Ethnicity, Florida, 2008-2017



Source: Florida Department of Health, Florida Cancer Data System

Breast Cancer Mortality

In Florida, the age-adjusted mortality rate for breast cancer among women has decreased 36.9 percent from its peak in 1995 (30.1 per 100,000). Figure 4 illustrates the statewide age-adjusted breast cancer mortality rates per 100,000 women from 2008 through 2017. The age-adjusted breast cancer mortality rate has slightly declined from 20.8 per 100,000 women in 2008 to 19.0 per 100,000 women in 2017.

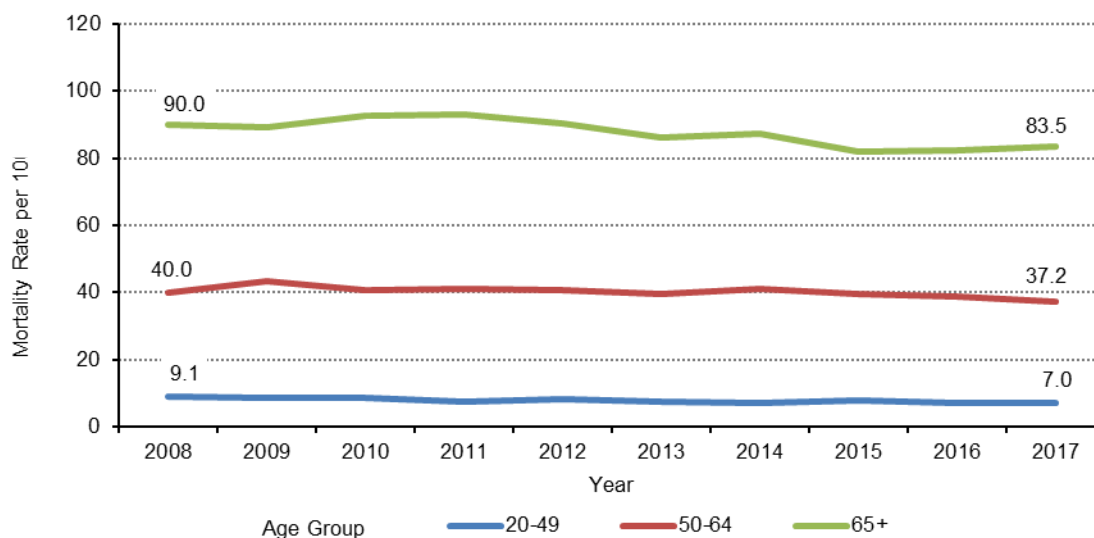
Figure 4. Age-Adjusted Breast Cancer Mortality Rate per 100,000 Women, Florida, 2008-2017



Source: Florida Department of Health, Bureau of Vital Statistics

Figure 5 depicts the age-specific breast cancer mortality rate per 100,000 women. In 2017, the rate was 7 for the 20-49 age group; 37.2 for the 50-64 age group; and 83.5 for the 65 and older age group. From 2008 to 2017, mortality rates decreased among women of all age groups.

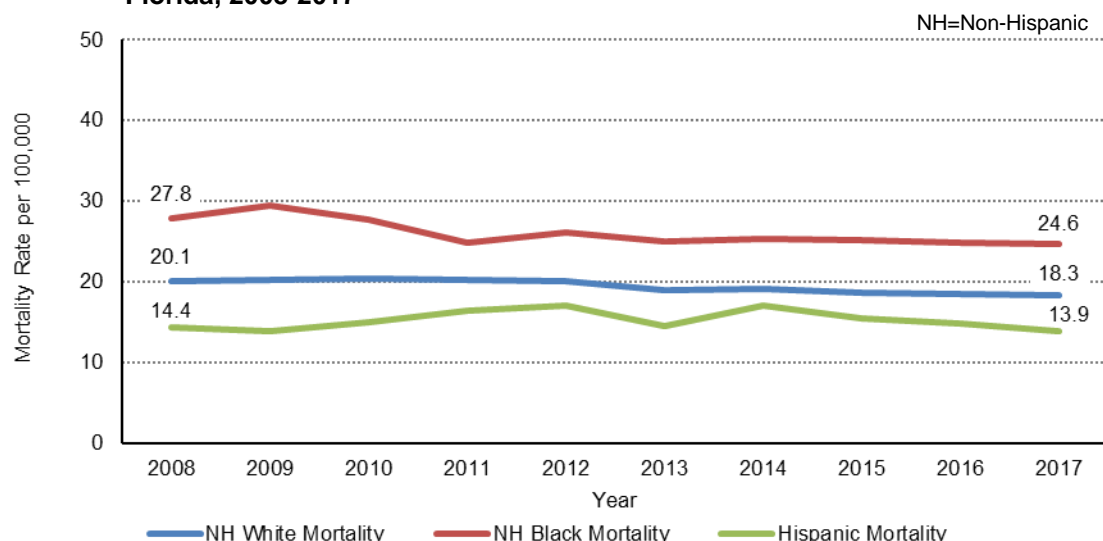
Figure 5. Age-Specific Breast Cancer Mortality Rate per 100,000 Women by Age Group, Florida, 2008-2017



Source: Florida Department of Health, Bureau of Vital Statistics

Figure 6 depicts the age-adjusted breast cancer mortality rate per 100,000 women by race/ethnicity. In 2017, the rate was 24.6 among non-Hispanic Blacks, 18.3 among non-Hispanic Whites, and 13.9 among Hispanics. Since 2014, the rate has remained relatively stable among all racial groups. However, there has been a decrease for these groups over the 10-year period: rates among non-Hispanic Black women decreased by 14 percent, rates among non-Hispanic White women decreased by 8.5 percent, and rates among Hispanic women decreased by 3.5 percent.

Figure 6. Age-Adjusted Breast Cancer Mortality Rates per 100,000 Women by Race/Ethnicity, Florida, 2008-2017



Source: Florida Department of Health, Bureau of Vital Statistics

Breast Cancer Screening

In 2016, the United States Preventive Services Task Force (USPSTF) recommended biennial mammography screening among women aged 50 to 74 years.⁵ Primary prevention of breast cancer includes adhering to recommendations related to modifiable risk factors. Mammography is the single most effective method of early detection since it can identify cancer several years before physical symptoms develop. Nevertheless, women should know size, symmetry, and skin appearance of their breasts and report any changes to their doctor. An objective of Healthy People 2020 is to increase the proportion of women aged 50-74 who receive breast cancer screening based on the most recent clinical guidelines from a baseline of 73.7 percent to 81.1 percent.⁷ Florida has met this Healthy People 2020 objective.

Table 1. Percentage of Women Age 50-74 Who Had a Mammogram in the Past Two Years, Florida, 2016

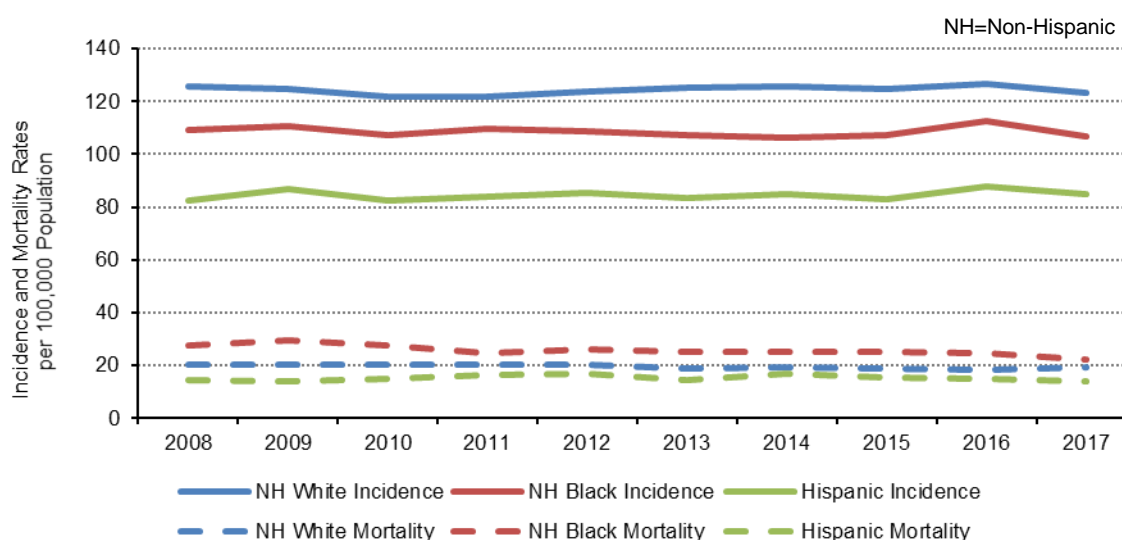
	Breast Cancer Screening (%)
	Mammogram*
Overall	81.4
Race/Ethnicity	
Non-Hispanic White	79.7
Non-Hispanic Black	83.1
Hispanic	88.5

Source: Florida Behavioral Risk Factor Surveillance System

Disparities in Breast Cancer in Florida

Disparities by race and ethnicity continue. Overall, Hispanic women have lower rates of occurrence and mortality for breast cancer than non-Hispanic Black and non-Hispanic White women, as shown in Figure 7. Non-Hispanic Black women have a lower incidence of breast cancer compared to non-Hispanic White women, yet they die from breast cancer at a higher rate. There are individual, medical and system level factors that contribute to disparities in breast cancer treatment. Many significant barriers that women receiving breast cancer treatment face are system level problems, specifically care coordination and scheduling.⁹

Figure 7. Age-Adjusted Breast Cancer Incidence and Mortality Rates per 100,000 Women by Race/Ethnicity, Florida, 2008-2017



Source: Florida Department of Health, Bureau of Vital Statistics and Florida Cancer Data System

Evidence-based Interventions to Increase Breast and Cervical Cancer Screening

While screening rates are improving, achieving the Healthy People 2020 objective of increasing the proportion of women who receive a breast cancer screening within sub-populations based on the current guidelines remains challenging.⁹ Therefore, the FBCCEDP is implementing strategies to reduce barriers for women needing breast cancer screenings. During Fiscal Year (FY) 2017-18, FBCCEDP's 16 regions received state and federal funding to increase breast and cervical cancer screenings for program-eligible women. Additionally, funding was provided to increase awareness of the importance of breast and cervical cancer screenings statewide. Various evidence-based interventions, such as client reminders, provider reminders, provider assessment and feedback, and ways to reduce structural barriers were used to reach women who were enrolled in the program or referred to other screening alternatives. Provider education, creation of new partnerships and working with health systems to increase population-based screening rates have been implemented.

Florida Breast Cancer Early Detection and Treatment Referral Program Overview

Congress passed the Breast and Cervical Cancer Mortality Prevention Act of 1990; Public Law 101-354, which directed the CDC to create the NBCCEDP. The Florida Breast Cancer Early Detection and Treatment Referral Program was authorized by the Florida Legislature on July 1, 2001. From this, the FBCCEDP was created at the Florida Department of Health.

The FBCCEDP, also known as the "Mary Brogan Program," provides services for breast and cervical cancer screening, some follow-up diagnostic services for abnormal screenings and referral to the Department of Children and Families for determination of eligibility for treatment for Medicaid-eligible women. Assistance in locating treatment options is provided to women not eligible for Medicaid. Major goals of the FBCCEDP include:

- Increasing breast and cervical cancer screening rates.
- Promoting evidence-based breast and cervical cancer screening.
- Reducing breast and cervical cancer health disparities.
- Leveraging available resources through partnerships.

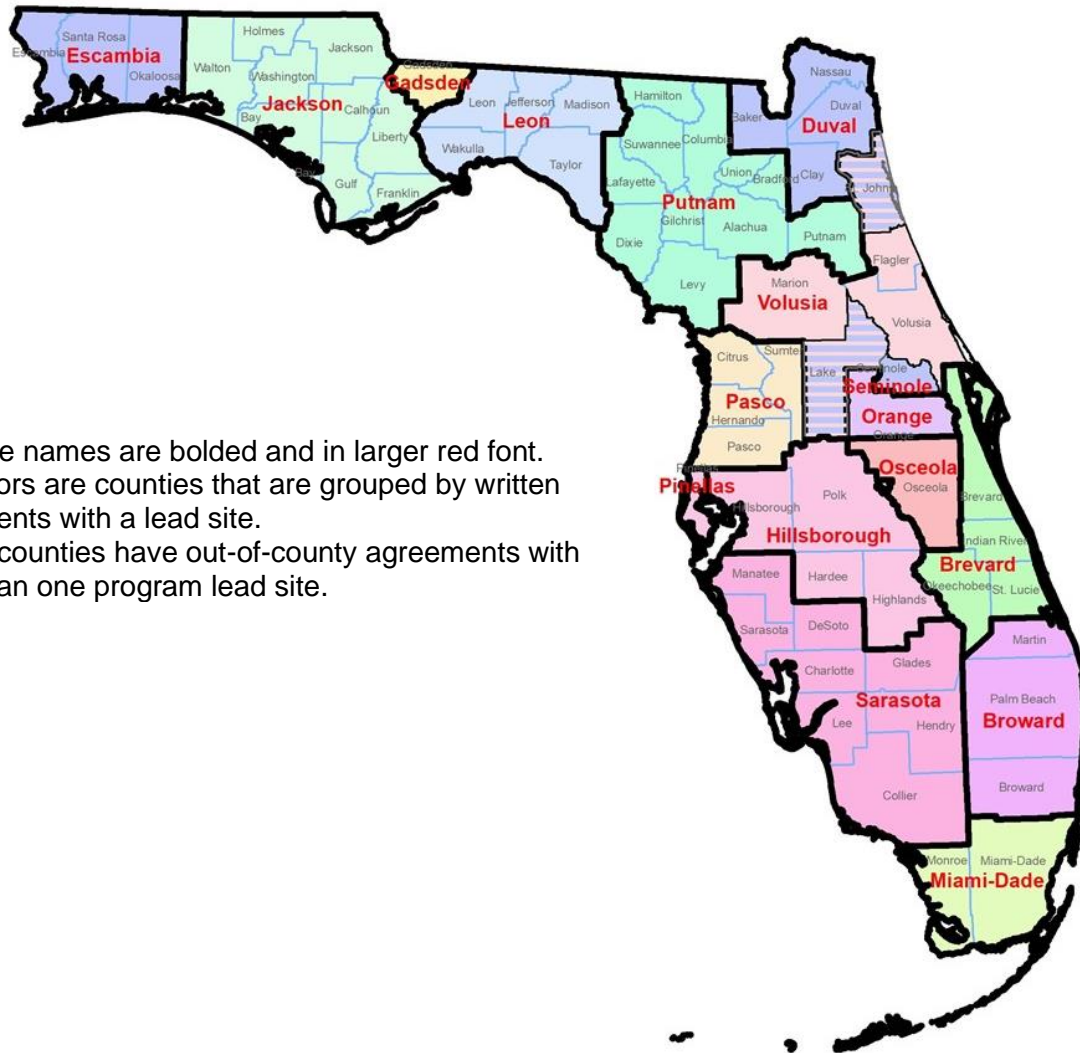
The eligibility requirements for women to be screened by the FBCCEDP include all of the following:

- Aged 50-64
- At or below 200 percent of the FPL
- Underinsured or uninsured

Women below age 50 who are symptomatic or have a family history of breast cancer, meet the eligibility requirements for poverty level, or are underinsured or uninsured may be also screened by the program.

During FY 2017-18 the FBCCEDP operated through 16 regional sites. In December 2018, a seventeenth site, Orange County, was added. These regional sites, housed at county health departments, were established to allow women to obtain access to the FBCCEDP from all 67 counties. Figure 8 displays the lead county locations during 2019, which are: Brevard, Broward, Duval, Escambia, Gadsden, Hillsborough, Jackson, Leon, Miami-Dade, Orange, Osceola, Pasco, Pinellas, Putnam, Sarasota, Seminole, and Volusia Counties.

Figure 8. FBCCEDP Regions



- Lead site names are bolded and in larger red font.
- Like colors are counties that are grouped by written agreements with a lead site.
- Striped counties have out-of-county agreements with more than one program lead site.

Florida Breast and Cervical Cancer Early Detection Program Services

The FBCCEDP promotes referrals through a variety of ways including collaborations with churches, participating in community events, and developing partnerships with health care providers. These collaborations have been an asset to reach at-need women who are unaware of the program and the services provided. Additionally, the program's collaboration with county health departments, Federally Qualified Health Centers, and physician offices increases awareness for women who lack access to breast and cervical cancer screenings. This results in an increase of the number of referrals to FBCCEDP.

The FBCCEDP educates the public through outreach efforts using program information sheets, public speaking events, media, banners displayed at providers' offices to promote breast and cervical cancer screenings, and direct-mail postcards sent to Florida residents in underserved counties. Also, the program collaborates with internal and external programs to educate women on the importance of breast and cervical cancer screenings. Through these efforts, the program reaches high-risk women who lack insurance and barriers to health care.

The program collaborates with Medicaid to provide treatment and referral for those who have been diagnosed with breast or cervical cancer. If a woman is not approved for Medicaid, the FBCCEDP coordinator refers the patient to a physician or an agency that can provide treatment within the patient's county of residence.

The Cancer Screening and Tracking System (CaST) is a database developed by CDC which contains data from the FBCCEDP patient reporting form. These data are used for in-house reports and sent to CDC biannually for assessment. CDC conducts an in-depth analysis of the data, which includes eleven core indicators the Florida program should meet.

Strategies and Partnerships

Opportunities to recruit women to the program are conducted through outreach in churches, community groups, and local partnerships with health organizations. The goal is to increase breast and cervical cancer screenings among the disparate racial/ethnic population groups. Efforts in every Florida county are ongoing to ensure all women are aware of the services and have access to the FBCCEDP as well as similar screening and treatment programs, such as American Cancer Society or Susan G. Koman®, for women who are not eligible to participate in the FBCCEDP.

Strategies for breast and cervical cancer screenings are the following:

- Increase breast cancer screenings for women over age 50.
- Increase outreach efforts to high-risk populations to educate women on breast and cervical cancer screening options and refer them for appropriate screening.
- Increase access for women to quality, accredited mammography facilities with reasonable waiting time for obtaining service.
- Educate on signs and symptoms and promote breast self-awareness.
- Increase awareness of inflammatory breast cancer for health care providers and women.

Table 2. Illustrates FBCCEDP's extensive collaborative network, including public and private sector partners. These collaborations draw strengths from each program to increase access to care for low income and underserved women. Each collaboration contributes to the effectiveness of the FBCCEDP operation.

Table 2. Internal and External FBCCEDP Partners

Internal Partners	External Partners
Bureau of Chronic Disease Prevention	American Cancer Society
Bureau of Clinic Management and Informatics	Department of Children and Families-Medicaid Eligibility
Bureau of Community Health Assessment	Department of Transportation-Disadvantaged Transportation Program
Bureau of Family Health Services	Florida Association of Community Health Centers
Division of Disease Control and Health Protection	Florida Cancer Control and Research Advisory Council
Florida Comprehensive Cancer Control Program	Florida Community Health Worker Coalition
Office of Communications	Florida Rural Health Association
Office of Minority Health and Health Equity	South East American Indian Council
Office of Rural Health	Susan G. Komen®
Public Health Research Unit	University of Central Florida-Health ARCH (Advancing Resources to Change Healthcare)

Table 3 depicts the total amount of breast cancer screening and diagnostic services provided by the FBCCEDP during FYs 2015-16, 2016-17, and 2017-18. The table shows that over 28,800 breast services and over 4,000 cervical services were provided during FY 2017-18. During FY 2017-18, over 17,000 women received mammography and Pap screenings and, among the women screened, 2 percent were diagnosed with breast cancer and fewer than 1 percent with cervical cancer or pre-cancer.

Table 3. Florida Breast and Cervical Cancer Early Detection Program, Breast Services Provided and Cancers Identified, July 2015 through June 2018

	FY 2015-16	FY 2016-17	FY 2017-18
Total number of screening and diagnostic services provided	28,854	28,459	28,832
Number of unique clients receiving services	13,717	14,045	14,460
Number of cancers detected	282	275	285

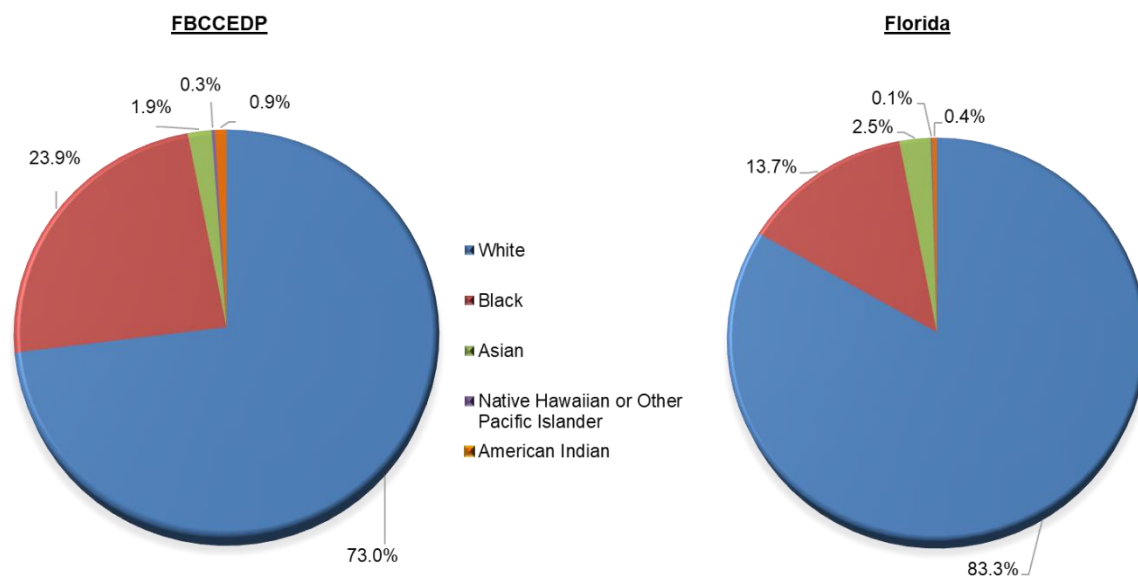
Source: Florida Department of Health, Bureau of Tobacco Free Florida,
Florida Breast and Cervical Cancer Early Detection Program

FBCCEDP Racial/Ethnic Cancer Screening Disparities

Racial/ethnic cancer disparities exist among women in Florida and there is a need to improve breast and cervical cancer health outcomes. Early detection statewide services were implemented which will affect the incidence, prevalence, and mortality among at-need women in the state.

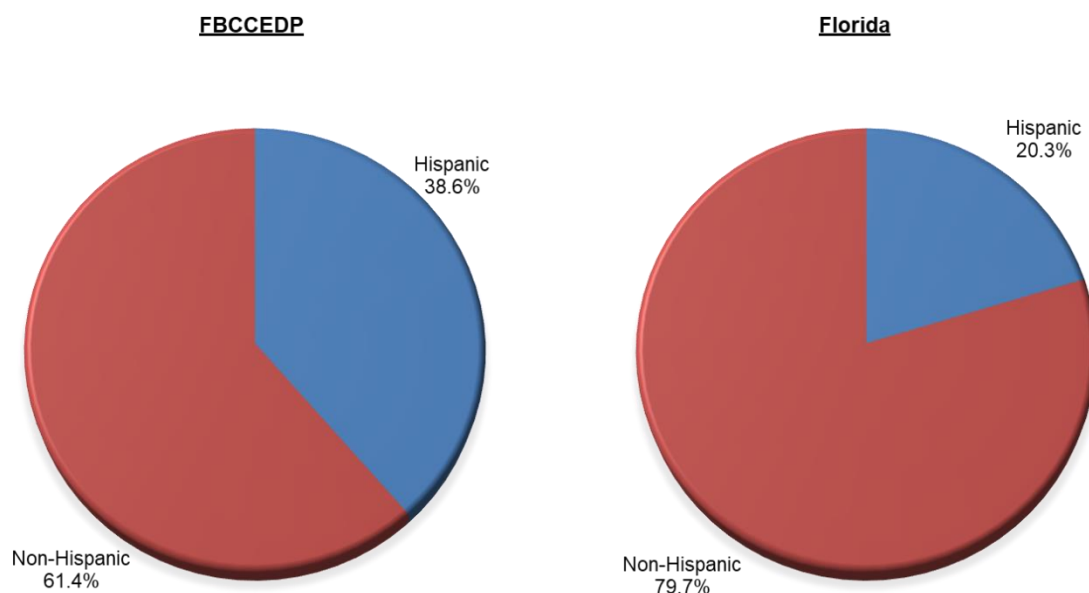
Currently, racial/ethnic disparities exist among women screened by FBCCEDP. Figures 12 and 13 depict the comparisons of women aged 50-64 screened for breast cancer by race and ethnicity respectively by the FBCCEDP as compared to the 2010 United States Census Bureau population of women for the same age group. Current FBCCEDP screening rates for Asian, White, and non-Hispanic communities do not align with Florida's 2010 United States Census Bureau population of women. Evidence-based interventions will aid to increase the screenings for these populations.⁸

Figure 9. Percentage of Women Screened for Breast Cancer by Race, FBCCEDP as Compared 2010 United States Census Bureau Florida Population for Women Aged 50-64, FY 2017-18



Sources: 2010 United States Census Bureau for women aged 50-64
Florida Breast and Cervical Cancer Early Detection Program

Figure 10. Percentage of Women Screened for Breast Cancer by Ethnicity, FBCCEDP as Compared 2010 United States Census Bureau Florida Population for Women Aged 50-64, FY 2017-18



Sources: 2010 United States Census Bureau for women aged 50-64
Florida Breast and Cervical Cancer Early Detection Program

FBCCEDP Success Story

Key Partnerships to Increase Florida Breast Cancer Screenings

The National Breast and Cervical Cancer Early Detection Program identified four evidence-based interventions to increase screenings among women aged 50-64 years, at or below 200 percent of the FPL, and uninsured or underinsured. The evidence-based interventions are patient reminders, provider reminders, provider assessment and feedback, and reducing structural barriers. The FBCCEDP is making great strides to assist women with addressing structural barriers (i.e. reducing time/distance to services, providing transportation, extending clinical hours) to increase access to mammogram screenings through partnerships with community-based organizations.

Challenge

Structural factors, such as location, distance, transportation, and health systems' hours of operation, can make it difficult for women to access cancer screenings. In Florida, even when a mammogram is provided at low or no cost, women may experience structural barriers and obstacles that create a challenge to attend their mammogram screening appointments. To reduce structural barriers, bus tokens or gas cards are offered as a viable solution. However, the FBCCEDP staff recognize that at times more is needed to overcome these types of challenges experienced by the women enrolled in the program, especially for those living in rural areas. Therefore, the FBCCEDP staff made it a priority to find a resolution that would provide evidence-based interventions designed to reduce structural barriers and facilitate access to breast cancer screening services.

Solution

To increase access among hard-to-reach women and women in rural areas, the FBCCEDP staff developed a mobile mammography van (MMV) guidance manual. Once the manual was created, it was introduced to all regional coordinators as part of the program's overall health system change strategy to increase Florida's mammogram screenings. The MMV guidance manual was designed to provide strategies and best practices for regional coordinators to initiate new partnerships with MMV providers to reach high risk and underserved women, especially those in rural areas. The MMV guidance manual provides an effective way for creating a health system change to increase breast cancer early detection screenings and to reduce health disparities for breast cancer.

Results

As a result of introducing the MMV guidance manual as part of an overall program health system change strategy to increase breast screenings, the local offices formed four new agreements with MMV providers. This increased the program's number of partnerships from eight to twelve increasing the number of women screened through MMV providers from 500 in FY 2017-18 to over 1,200 women for FY 2018-19. The success experienced by partnering with MMV providers is promising. The FBCCEDP always seeks to increase options for women to access care and increase the number of breast cancer screenings in disparate, hard-to-reach populations, while meeting its overall screening goal.

Sustaining Success

- Identifying effective ways to increase mammography screenings among vulnerable populations is important to improving their breast cancer outcomes.
- Partnerships with mobile mammography providers combined with strong outreach while involving community-based organizations may be effective in reaching women who are most at-need (i.e., medically underserved and low socioeconomic status).

Florida Breast and Cervical Cancer Early Detection Program Evaluation

University of West Florida Usha Kundu, MD, College of Health (UWF UKCOH)

Key Informant Interview Summary Report of FBCCEDP

The UWF UKCOH entered into a statement of work for evaluation services for the FBCCEDP in 2017. One of the deliverables was to conduct key informant interviews with the regional coordinators in order to perform program evaluation. Broward, Escambia, Gadsden, Leon, Pinellas, and Sarasota regional coordinators were interviewed via telephone during business hours and general themes emerged.

The report found the regions interviewed reached their mammogram goals and improved their recruitment of at-need women. The regions were extremely satisfied with central office sending information related to report data and financial data. The report states that FBCCEDP is fulfilling its mission and meeting the needs of eligible women in increasing screening rates, reducing health disparities, and leveraging community resources to improve morbidity and mortality related to breast and cervical cancer.

UWF UKCOH, Cost Effectiveness Analysis, 2019

The UWF UKCOH developed a model of cost-effectiveness for the FBCCEDP as a whole and for each of the 16 active FBCCEDP regions during FY 2017-18, using CDC grant-required minimal data elements and other relevant data, such as the Florida BRFSS. From this, another model was developed in conjunction with relevant analyses of the program to determine the

cost-effectiveness. It was found that every \$1 spent on breast cancer procedures (screening and diagnostic) resulted in \$2.33 in cost savings. In addition, every \$1 spent on cervical cancer procedures (screening and diagnostic) resulted in \$2.14 in cost savings.

UWF UKCOH Evaluation Conclusions

Over the ten-year period from 2008 to 2017, breast cancer incidence has increased by nearly 5 percent while mortality rates have decreased by 8.7 percent in Florida. The reduction in mortality rates is partly due to ongoing progress in both screening and improved treatment. Despite the decline in breast cancer mortality, breast cancer has remained the most diagnosed cancer and the second leading cause of cancer deaths among women.

During FY 2017-18, 16 active FBCCEDP regions received state and federal funding to increase breast and cervical cancer screenings for program-eligible women. Additionally, funding was provided to increase awareness of the importance of breast and cervical cancer screenings statewide.

The FBCCEDP is a vital resource for women who remain uninsured. In FY 2017-18, the \$1.8 million legislative appropriation of general revenue and the \$6 million from the CDC grant allocation were spent on mammograms, Pap tests, diagnostics, biopsies, administrative fees, and evidence-based interventions to increase screening rates and to reduce the burden of cancer in Florida. Increased access to screening, as a result of efforts to raise awareness and address structural barriers, helps diagnose cancer at the earliest, most treatable stage. Program screening numbers have varied due to changes in the recommended screening intervals, the transition of primary care health services from county health departments to external providers, and a change in provider base.

During FY 2018-19, the FBCCEDP maximized the funding for services as well as increasing population-based and health systems change strategies. In an effort to increase screening rates across the state using a population-based approach, the FBCCEDP will continue to partner with the American Cancer Society, Federally Qualified Health Centers, cancer coalitions, community-based organizations, and other groups to create a sustainable collaboration to explore ways that women in disparate populations can be reached and served. One of the primary objectives of the partnerships is to increase and improve communication strategies that will encourage women to receive regular screenings and health exams. The FBCCEDP short and long-term goals are focused on increasing community awareness and creating synergy for active participation among partners to reduce cancer mortality rates. This includes those partners or providers who are in rural areas of Florida where there are high rates of late-stage breast cancer. Looking forward, the FBCCEDP will move toward expanded population-based and health systems change strategies through evidence-based interventions, which will increase opportunities to serve more women and make a larger impact in Florida.

Appendix A. Data Sources and Methods

Data Sources

Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is a telephone-based (land lines and mobile phones) survey that uses a random-digit dial sampling methodology to collect state data from respondents 18 years of age and older concerning their health and health behaviors. The BRFSS has been conducted annually in Florida since 1986 and gathers detailed information about chronic health conditions, health-related risk behaviors, and the prevalence of preventive health care practices among Florida adults. The BRFSS data included in this report have been weighted to be representative of the state population. Weighting is a procedure that adjusts for the chance of being selected to participate in the survey and for discrepancies between those who complete the survey and the overall population of Florida.

Florida Cancer Data System

The Florida Cancer Data System (FCDS) provided data for this report on cancer incidence. Hospitals, pathology laboratories, ambulatory surgical centers, radiation therapy facilities, and physicians' offices are required to report new cancer cases to the FCDS per section 385.202, Florida Statutes. Insurance claims data is also used to capture new cases. Incidence rates are based on cancers diagnosed in Florida residents during the respective reporting year. The data do not include cancers diagnosed before a person became a Florida resident. The majority of cancer cases in Florida residents diagnosed in other states are captured in the FCDS database through sharing of cancer incidence data among states, according to the North American Association of Central Cancer Registries (NAACCR) Procedure Guidelines (page two, Series I, Data Exchange). Cases are tallied according to the year of initial diagnosis. People with multiple primary cancers contribute multiple records to the database.

Vital Statistics

The mortality data in this report are derived from the Florida Department of Health, Bureau of Vital Statistics, and includes cases with breast or cervical cancer listed as the underlying cause of death on death certificates. Mortality counts and rates were pulled from FloridaHealthCHARTS (www.FLHealthCHARTS.com).

Cancer Screening and Tracking System (CaST)

The CDC's cancer data entry software, Cancer Screening and Tracking System (CaST), is used to collect data on the women eligible for FBCCEDP. It contains demographic, screening, and diagnostic treatment information, as well as where and when cancer treatment was performed. Data were extracted for the race and ethnicity charts.

Methods

Race and ethnicity are presented as a combined measure in this report. In most cases, race and ethnicity were captured as two separate measures. Race and ethnicity measures were combined to create the following groups when possible: non-Hispanic White, non-Hispanic Black, and Hispanic. Any individual coded as Hispanic was considered Hispanic, regardless of race.

Appendix B. FBCCEDP Patient Report Form



Patient Reporting Form (PRF)

Florida Breast and Cervical Cancer
Early Detection Program

Region: _____ Date Enrolled: _____

GENERAL INFORMATION

1. Basic DemographicsFull Name: _____
Last First Middle Initial

Date of Birth: ____/____/____ SSN: _____ Telephone: _____

Mailing Address: _____

City County Zip Code

Hispanic? Yes ☐ No ☐

Race: (✓ all that apply)

<input type="checkbox"/> White	<input type="checkbox"/> Native Hawaiian or Other Pacific Islander
<input type="checkbox"/> Black or African American	<input type="checkbox"/> American Indian or Alaska Native
<input type="checkbox"/> Asian	<input type="checkbox"/> Unknown

Primary Language: _____

2. Personal Health Information

Height (inches): _____ Weight (pounds): _____

Has medical personnel ever told the client she was: (✓ all that apply)

Does the client:	<input type="checkbox"/> Pre-diabetic	<input type="checkbox"/> Diabetic		
	<input type="checkbox"/> High blood pressure	<input type="checkbox"/> High blood cholesterol		
	<input type="checkbox"/> Exercise 5x weekly	<input type="checkbox"/> Eat 5 servings of fruits/vegetables daily	Referred to Services:	Yes <input type="checkbox"/> No <input type="checkbox"/>

Tobacco Use: Daily ☐ Some Days ☐ Not at all ☐ Declined to answer ☐ Referred to Quitline: Yes ☐ No, not referred ☐ Declined referral ☐

3. Screening, Undocumented and How Learned of Program

Screening Status: Initial ☐ Rescreen ☐ Short-term Follow-up ☐ Undocumented: Yes ☐ No ☐

How did client learn about the program?

<input type="checkbox"/> ACS	<input type="checkbox"/> Billboards	<input type="checkbox"/> Brochures
<input type="checkbox"/> Bus wraps/bench/placards	<input type="checkbox"/> CHD	<input type="checkbox"/> Community
<input type="checkbox"/> Educational Session	<input type="checkbox"/> Family/Friend	<input type="checkbox"/> FQHC
<input type="checkbox"/> In-reach	<input type="checkbox"/> Internet	<input type="checkbox"/> Medical Office
<input type="checkbox"/> Newspaper	<input type="checkbox"/> Outreach	<input type="checkbox"/> Postcard
<input type="checkbox"/> Radio	<input type="checkbox"/> Social Media	<input type="checkbox"/> Television
Other: _____		

Name: _____ DOB: ____/____/____ Region: _____

BREAST**4. Breast Risk Information and History**

Risk for Breast Cancer: Average ☐ High/Increased ☐ Not Assessed ☐ Unknown ☐ Symptoms: Yes ☐ No ☐

Has client ever had: breast cancer? Yes ☐ No ☐ a previous mammogram? Yes ☐ No ☐ Date of previous mammogram: ____/____/____

5. Clinical Breast Exam

CBE Result: Normal/Benign Findings ☐ Abnormality Suspicious for Cancer ☐ Not Performed ☐

CBE Provider #: _____

CBE Screening Date: ____/____/____

CBE Paid by FBCCEDP: ☐ Yes ☐ No**Additional Breast Procedures for CBE**

- ☐ Additional procedures needed or planned
- ☐ Additional procedures not needed or planned

6. Mammogram**Indication for Mammogram**

- ☐ Screening
- ☐ Diagnostic
- ☐ Non-program mammogram, CBE only, Referred in for diagnostic evaluation
Breast Diagnostic Referral Date: ____/____/____
- ☐ No mammogram. Direct to diagnostics for short-term follow-up
Breast Diagnostic Referral Date: ____/____/____
- ☐ No breast service

Mam Provider #: _____

Mam Screening Date: ____/____/____

Mam Paid by FBCCEDP: ☐ Yes ☐ No**Mammogram Result**

- ☐ Negative (BI-RADS 1)
- ☐ Benign Finding (BI-RADS 2)
- ☐ Probably Benign/STFU suggested (BI-RADS 3)
- ☐ Unsatisfactory
- ☐ Result Pending
- ☐ Result unknown, presumed abnormal, mam from non-funded source

- ☐ Suspicious Abnormality (BI-RADS 4)
- ☐ Highly Suggestive of Malignancy (BI-RADS 5)
- ☐ Need evaluation or film comparison (BI-RADS 0)

Additional Procedures for Mammogram

- ☐ Additional procedures needed or planned
- ☐ Additional procedures not needed or planned
- ☐ Need or plan for additional procedures not yet determined.

Name: _____ DOB: ____/____/____ Region: _____

7. Additional Breast Procedures

Breast Imaging Procedures	Date	Paid		Provider Number
		Yes	No	
<input type="checkbox"/> Additional Mammographic Views	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/> Ultrasound	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/> Film Comparison	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
MRI Pre-Authorization Date:	_____	Central Office Nurse:		_____
<input type="checkbox"/> Magnetic Resonance Imaging	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____

* Check if additional page 3, Section 7. Additional Breast Procedures, is needed to document more than one imaging procedure:

Final Imaging Outcome

- ☐ Negative (BI-RADS 1) ☐ Suspicious abnormality (BI-RADS 4)
☐ Benign Finding (BI-RADS 2) ☐ Highly suspicious of malignancy (BI-RADS 5)
☐ Probably Benign/STFU suggested (BI-RADS 3) ☐ Unsatisfactory
Final Imaging Date: _____

Breast Diagnostic Procedures

	Date	Paid		Provider Number
		Yes	No	
<input type="checkbox"/> Repeat Breast Exam/ <input type="checkbox"/> Surgical Consultation	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/> Repeat Breast Exam/ <input type="checkbox"/> Surgical Consultation	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/> Biopsy	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/> Repeat Biopsy (comment required)	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/> Fine Needle/Cyst Aspiration	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____

8. Breast Final Diagnosis**Status of Breast Final Diagnosis**

- ☐ Work-up complete
☐ Work-up pending

- ☐ Lost to follow-up (check if woman has died before F/U)
☐ Work-up refused

If status of final diagnosis is *lost to follow-up or refused*, please complete Final Diagnosis Status Expansion and Comments (page 6).**Final Breast Diagnosis**

- ☐ Breast Cancer Not Diagnosed
☐ Carcinoma In Situ, Other
☐ Invasive Breast Cancer
☐ Lobular Carcinoma In Situ (LCIS) (Stage 0)
☐ Ductal Carcinoma In Situ (DCIS) (Stage 0)

Left **Right**

- ☐ ☐
☐ ☐
☐ ☐
☐ ☐
☐ ☐

Final Diagnosis Date: _____**Diagnosis Facility:** _____**9. Breast Cancer Treatment Status**

- ☐ Treatment started
☐ Treatment pending

- ☐ Lost to follow-up (check if woman has died before starting treatment)
☐ Treatment refused
☐ Treatment not needed

If treatment status is *lost to follow-up, refused, or not needed*, please complete Final Diagnosis Status Expansion and Comments (page 6).**Treatment Start Date:** _____**Treatment Facility:** _____

CENTRAL OFFICE USE ONLY – MEDICAID FOR BREAST CANCER				COMMENTS:	
REFERRED TO MEDICAID FOR TREATMENT?	Yes	No			
	<input type="checkbox"/>	<input type="checkbox"/>	MEDICAID REFERRAL DATE: _____		
PATIENT ENROLLED?	Yes	No			
	<input type="checkbox"/>	<input type="checkbox"/>	MEDICAID APPROVAL DATE: _____		

Name: _____ DOB: ____/____/____ Region: _____

CERVICAL**10. Cervical Cancer Risk Information and History**

Risk for Cervical Cancer: ☐ Average ☐ High/Increased ☐ Not Assessed ☐ Unknown ☐ Yes ☐ No

Previous Dx'd Cervical Cancer? ☐ Yes ☐ No

Previous Pap Test? ☐ Yes ☐ No ☐ Unknown Date of Previous Pap? _____

11. Pap**Indication for Pap**

- ☐ Screening
- ☐ Surveillance
- ☐ Non-program Pap. Referred in for diagnostic evaluation
Cervical Diagnostic Referral Date: ____/____/____
- ☐ No Pap. Direct to diagnostics for short-term follow-up
(less than three years since previous Pap)
Cervical Diagnostic Referral Date: ____/____/____
- ☐ No cervical service

Pap Provider #: _____

Pap Screening Date: ____/____/____

Pap Paid by FBCCEDP: ☐ Yes ☐ NoSpecimen Type: ☐ Conventional Smear ☐ Liquid BasedSpecimen Adequacy: ☐ Satisfactory ☐ Unsatisfactory**Pap Result**

- ☐ Negative for intraepithelial lesion or malignancy
- ☐ Infection/Inflammation/Reactive Changes
- ☐ Atypical squamous cells of undetermined significance (ASC-US)
- ☐ Low Grade SIL (including HPV changes)
- ☐ Other _____
- ☐ Unsatisfactory
- ☐ Result Pending

- ☐ Atypical squamous cells cannot exclude HSIL (ASC-H)
- ☐ High Grade SIL
- ☐ Squamous Cell Carcinoma
- ☐ Atypical Glandular Cells
- ☐ Adenocarcinoma In Situ (AIS)
- ☐ Adenocarcinoma
- ☐ Result Unknown, presumed abnormal, Pap test from non-program funded source

Diagnostic Work-up Planned for Cervical Dysplasia or Cancer:

- ☐ Diagnostic work-up planned on basis of abnormal Pap test or pelvic exam
- ☐ Diagnostic work-up not planned
- ☐ Diagnostic work-up plan not yet determined

12. HPV**Indication for HPV**

- ☐ Co-Test/Screening
- ☐ Triage
- ☐ Test not done
- ☐ Unknown

HPV Result

- ☐ Positive
- ☐ Negative
- ☐ Unknown

HPV Provider #: _____

HPV Screening Date: ____/____/____

HPV Paid by FBCCEDP: ☐ Yes ☐ No

Name: _____ DOB: ____/____/____ Region: _____

13. CERVICAL DIAGNOSTIC PROCEDURES

Cervical Diagnostic Procedures	Date	Paid		Provider Number
		Yes	No	
<input type="checkbox"/> Colposcopy without biopsy	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/> Colposcopy with biopsy and/or ECC	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/> Other cervical procedures performed	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
Please specify: _____	_____			
<input type="checkbox"/> ECC alone	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____

LEEP or Cold Knife Cone	Central Office Nurse:
Pre-Authorization Date: _____	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Diagnostic Cold Knife Cone (CKC)	_____
<input type="checkbox"/> Diagnostic LEEP	_____

14. CERVICAL FINAL DIAGNOSIS**Status of Cervical Final Diagnosis**

- ☐ Work-up complete
☐ Work-up pending

- ☐ Lost to follow-up (check if woman has died before F/U)
☐ Work-up refused

*If status of final diagnosis is **lost to follow-up or refused**, please complete Final Diagnosis Status Expansion and Comments (page 6).*

Final Cervical Diagnosis

- ☐ Normal/Benign reaction/inflammation
☐ HPV/Condylomata/Atypia
☐ CIN 1/mild dysplasia (biopsy diagnosis)
☐ CIN 2/moderate dysplasia (biopsy diagnosis)
☐ CIN 3/severe dysplasia/Carcinoma in situ (Stage 0) or Adenocarcinoma in situ of the cervix (AIS) (biopsy diagnosis)
☐ Invasive cervical carcinoma (biopsy diagnosis)
☐ Other cancer diagnosis (only if patient has no cervix due to cervical cancer): _____
☐ Low grade SIL (biopsy diagnosis)
☐ High grade SIL (biopsy diagnosis)

Final Diagnosis Date: _____

Diagnosis Facility: _____

15. Cervical Cancer Treatment Status

- ☐ Treatment started
☐ Treatment pending
☐ Lost to follow-up (check if woman has died before starting treatment)
☐ Treatment refused
☐ Treatment not needed

*If treatment status is **lost to follow-up, refused, or not needed**, please complete Final Diagnosis Status Expansion and Comments (page 6).*

Treatment Start Date: _____

Treatment Facility: _____

CENTRAL OFFICE USE ONLY – MEDICAID FOR CERVICAL CANCER				COMMENTS:
REFERRED TO MEDICAID FOR TREATMENT?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	MEDICAID REFERRAL DATE: _____	
PATIENT ENROLLED?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	MEDICAID APPROVAL DATE: _____	

PRF Page 5

Name: _____ DOB: ____/____/____ Region: _____

16. FINAL DIAGNOSIS AND TREATMENT STATUS EXPANSION☐ Breast ☐ Cervical**Lost to follow-up**

- ☐ Lost to follow-up – not otherwise specified
☐ Lost to follow-up – deceased
☐ Lost to follow-up – moved

Refused

- ☐ Refused – not otherwise specified
☐ Refused – ineligible due to income or insurance
☐ Refused – transportation problems (treatment status only)
☐ Refused – financial problems (treatment status only)
☐ Refused – other problems (treatment status only)

17. COMMENTS

Regional Coordinator: _____ Date of Abnormal Result: _____
 Date of Comment: _____ Abnormal Result: _____

<u>Diagnostic:</u>	<u>Treatment:</u>	<u>Other:</u>
<input type="checkbox"/> DX work-up > 60 days	<input type="checkbox"/> Treatment > 60 days from DX	<input type="checkbox"/> Case transferred
<input type="checkbox"/> DX work-up refused	<input type="checkbox"/> Treatment refused	<input type="checkbox"/> Client deceased
<input type="checkbox"/> DX work-up lost to follow-up	<input type="checkbox"/> Treatment lost to follow-up	<input type="checkbox"/> Other reason for comment page

Notes

References

¹Florida Cancer Data System. *Florida Annual Cancer Report 2017 Incidence and Mortality*. Tallahassee, Florida Department of Health, 2020.

²Florida Department of Health Bureau of Vital Statistics. *Florida Death County Query System*. 2017.

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⁴United States Census. Surveys and Programs. *Small Area Health Insurance Estimates Program*, December 4, 2018. <https://www.census.gov/data-tools/demo/sahie/#/>

⁵American Cancer Society Cancer Screenings. *Cancer Screenings*. December 4, 2018. <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2018/cancer-facts-and-figures-2018.pdf>.

⁶United States Preventive Services Task Force, *Final Recommendation Statement: Breast Cancer: Screening*. November 2016. <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/breast-cancer-screening1>

⁷Healthy People 2020. 2020 Topics and Objectives: Cancer. December 5, 2018. <https://www.healthypeople.gov/2020/topics-objectives/topic/cancer/objectives>.

⁸Florida Behavioral Risk Factor Surveillance System. December 5, 2018. <http://www.flhealthcharts.com/charts/Brfss.aspx>

⁹Tejeda, S, et al. *Patient Barriers to Follow-Up Care for Breast and Cervical Cancer Abnormalities*. s.l. : Journal of Womens Health, 2013. pp. 507-517. Vol. 22.